

Improving Elementary Students' IPAS Learning Outcomes through the PQ4R Strategy

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Abstract

The purpose of this study is to ascertain how learning motivation and PQ4R (Preview, Question, Read, Reflect, Recite, Review) learning strategies affect the learning results of third-grade social studies students at SDIT Ibnu Sina Palopo. The study employs an ex post facto quantitative methodology. There were 17 students in grade III that made up the study's population and sample. Multiple-choice assessments on IPAS learning outcomes, observation sheets, and learning motivation questionnaires were used to gather data. With the aid of the SPSS software, data is analyzed using multiple linear regression and descriptive statistics. The results indicated that the learning outcomes of IPAS were in the good category with an average score of 80.59, students' learning motivation was in the very high category with an average score of 82.59, and the application of the PQ4R strategy was in the good category with an average score of 78.24. With a significance value of 0.001 (< 0.05) and a determination coefficient value (R^2) of 0.638, the hypothesis test findings demonstrated that the PQ4R learning technique and learning motivation concurrently had a substantial impact on social studies learning outcomes. Learning motivation (Sig. = 0.010) and PQ4R learning techniques (Sig. = 0.012) both significantly affected social studies learning outcomes. Thus, SDIT

Ibnu Sina Palopo third-grade students' social studies learning results are improved by PQ4R's learning approach and learning motivation.

Keywords: *Elementary School, Social Science Learning Outcomes, Learning Motivation, PQ4R Learning Strategy.*

INTRODUCTION

The paradigm of education in the twenty-first century must change from one that was originally focused on memorizing theory to one that emphasizes the development of critical, creative, and applicable thinking abilities. The Natural and Social Sciences (IPAS) course in Phase B (grade III Elementary School) is one example of how the Independent Curriculum, which emphasizes comprehensive and contextual competency development, is implemented in Indonesian education governance to meet this global demand. The purpose of social studies classes is to encourage students' scientific interest in the environmental and social phenomena that surround them. However, inadequate reading comprehension skills provide a significant barrier to the Independent Curriculum's objective, as seen by Indonesia's consistently low reading literacy ranking on an international scale like PISA. This reading comprehension deficit has a cascading effect on social studies instruction, which is characterized by scientific terminology and concept illustrations. Students are able to recite texts but struggle to grasp the main ideas of the reading, which leads them to become mired in surface-level memorization techniques that produce poor learning outcomes.

The third-grader at SDIT Ibnu Sina Palopo provides a comprehensive description of this difficult circumstance. Based on preliminary studies, it was shown that mechanical phenomena, in which the majority of pupils can read extremely fluently but verbal fluency is not directly correlated with meaning comprehension. Pupils struggle to summarize the main ideas of reading social studies, struggle to solve high-level thinking skills (HOTS) issues, and are unable to connect the content to actual occurrences in the real world. A decline in students' motivation to study, which is typified by a passive attitude, lack of excitement, The combination of poor reading comprehension abilities and low learning desire eventually causes third-grade science pupils to attain subpar cognitive learning outcomes in the classroom.

Theoretical and empirical research emphasizes the significance of technical learning strategies—such as the PQ4R (Preview, Question, Read, Reflect, Recite, Review) learning strategy—that can incorporate active reading activities with student involvement in order to break this chain of issues. Some cutting-edge work has validated the efficacy of this method, which is based on the cognitive idea of deep processing. In their study, Sari and Mulyono (2021) shown that using systematic activities in PQ4R significantly improves students' reading comprehension abilities. In order to transform reading activities into an active process of information seeking, this technique fundamentally prepares pupils to have a defined purpose prior to reading.

According to Pratama's (2020) research, the PQ4R method has a significant favorable impact on students' accomplishment of cognitive learning outcomes when it comes to cognitive output. Structured phases make it easier for new ideas to be successfully ingrained in long-term memory. Accordingly, Wulandari's (2019) research on the emotive dimension revealed that PQ4R features that demand complete student participation might boost students' enthusiasm to

learn. Students feel more appreciated and actively involved when the Question stage is used to pique their curiosity because they actively look for solutions to the questions they freely develop.

There are study gaps that have not been fully addressed in the literature, despite the fact that the efficacy of PQ4R techniques has been extensively verified by prior studies. The majority of earlier research has primarily looked at characteristics related to reading proficiency or cognitive learning outcomes when examining the impact of PQ4R techniques. Furthermore, the majority of earlier research was done at the upper grade level in primary schools, such as grade IV or grade V, and was incorporated into the 2013 Curriculum ecosystem.

This study's primary drawback is the lack of a thorough understanding of how the PQ4R strategy functions when combined to measure two dimensions of bound variables simultaneously, namely the cognitive aspect (social studies learning outcomes) and the affective aspect (learning motivation), in the early transition phase of science subjects in the lower grades. In actuality, third-graders are receiving official IPAS curriculum for the first time during a critical point (the start of point B). The features of SDIT Ibnu Sina Palopo's Independent Curriculum. The SDIT Ibnu Sina Palopo Independent Curriculum's features necessitate meaningful, student-centered learning, which offers a distinct ecological environment that has never been investigated by scholars previously.

The following research questions are posed in this study based on the gap analysis: (1) Does the PQ4R strategy impact the learning outcomes of SDIT Ibnu Sina Palopo third-grade students?; and (2) Does the PQ4R strategy impact third-grade students' motivation to study social studies at SDIT Ibnu Sina Palopo? Accordingly, the goal of this experimental study is to determine and examine how the use of PQ4R learning techniques affects the learning motivation and social studies learning outcomes of third-grade students at SDIT Ibnu Sina Palopo. As part of the Independent Curriculum's implementation in integrated Islamic-based educational institutions, this study is novel in that it simultaneously tests PQ4R's cognitive strategy on the cognitive and affective dimensions of students in the first transition phase of science subjects in grade III elementary school. Both theoretically and practically, this study adds to the body of empirical evidence demonstrating how the PQ4R six-step framework can control low-grade students' thought processes to enhance memory retention, spark internal curiosity, and develop into a model of text-based literacy innovation pertinent to the demands of the most recent curriculum.

METHOD

This study employs an ex post facto research design and a quantitative methodology. The research emphasizes data measurement in the form of statistically analyzed statistics to evaluate predefined hypotheses, which is why the quantitative technique was used. The ex post facto type is employed because the researcher does not directly address the research variables but instead looks at the natural influence on student learning outcomes, specifically the impact of applying learning motivation (X2) and PQ4R (X1) strategies on IPAS (Y) learning outcomes.

This study was carried out during the second semester of the 2025–2026 academic year, namely from May to June 2026, at SDIT Ibnu Sina Palopo, which is situated on Jalan Latamacelling Number 20 A, Tompotikka Village, Wara District, Palopo City, South Sulawesi Province. The study's population consists of all 17 grade III students of SDIT Ibnu Sina Palopo, 11 of them are male and 6 are female. In order to ensure that all members of the population—

grade III students who have received science instruction with the orientation of the PQ4R strategy—are fully involved as research samples, the sampling technique employs Non-Probability Sampling with the type of Purposive Sampling, which determines the sample with specific considerations.

Three methods were used to get the data. Initially, X1 variable data was obtained by using observation sheets to document how the six phases of the PQ4R method (Preview, Question, Read, Reflect, Recite, Review) were applied throughout the IPAS learning process. According to Hamzah B. Uno (2017), there are six indicators of learning motivation, including the desire to succeed, motivation and learning needs, expectations and aspirations for the future, appreciation in learning, engaging learning activities, and a conducive learning environment. A questionnaire, also known as a closed questionnaire, is used to measure student learning motivation (X2). In order to reduce student response bias, the questionnaire employed a five-level answer choice scale: Always (SL), Often (SR), Occasionally (KD), Almost Never (HTP), and Never (TP). Positive statements received a score of 5 to 1, while negative statements received a score of 1 to 5. Third, the learning outcome test, which consists of ten multiple-choice questions with a score of 1 for the right answer and 0 for the incorrect response, was used to evaluate the learning outcome variable (Y) of IPAS. The exam was administered over the course of an hour of instruction (1 JP = 35 minutes). Additionally, supporting statistics such as the number of students, infrastructure, and social. Additionally, supporting data such as student enrollment, infrastructure, and social studies learning outcomes as school profiles are obtained through documentation procedures.

All instruments are evaluated for viability using validity and reliability tests with the aid of the SPSS software prior to being utilized in the gathering of study data. Pearson Product Moment correlation is used to construct the validity test, and an item is deemed legitimate if the computed value exceeds the table. According to the test results, every item on the learning motivation questionnaire received a calculation value between 0.478 and 0.689, and every item on the IPAS learning outcome test received a calculation value between 0.445 and 0.662. Both of these values were above the table of 0.324, indicating that every instrument item was deemed valid. The Alpha Cronbach coefficient was used to conduct the reliability test; if the Alpha Cronbach value was higher than 0.60, the instrument was deemed reliable. According to the test findings, both the learning motivation instrument and the IPAS learning outcome test have Cronbach's Alpha values of 0.782 and 0.801, respectively, indicating its reliability and suitability for use as a data gathering tool.

There are several steps in the data analysis method used in this study. An overview of the research data, including minimum and maximum values, average, standard deviation, and variances for PQ4R (X1), learning motivation (X2), and IPAS learning outcomes (Y), which were further divided into distinct intervals, was first provided by descriptive statistical analysis. Second, the analytical precondition test was performed, which included a linearity test of the connection between variables and a data normality test using the Kolmogorov-Smirnov test. Third, multiple linear regression analysis was used to test the hypothesis using the equation $Y = a + b_1X_1 + b_2X_2 + e$. This was followed by a determination coefficient test (R^2) to ascertain how much each independent variable contributed to the bound variable, a t-test (partial) to assess the impact of each independent variable separately, and the F test (simultaneous) to assess the

combined impact of the two independent variables on the learning outcomes of SDIT grade III Ibnu Sina Dogg science students.

FINDINGS

This study collected real data from 17 third-grade students at SDIT Ibnu Sina Palopo to determine the final impact of the variables studied. The PQ4R strategy observation sheet, learning motivation questionnaire scores, and IPAS learning outcome cognitive test scores are all part of the data collected. Table 1 mainly displays the descriptive results of the calculation statistics resulting from the processing of clean data using the SPSS program. X1X2Y

Table 1. Descriptive Statistical Recapitulation of Research Variables

Parameters Statistics	PQ4R Strategy (X_1)	Learning Motivation (X_2)	Social Sciences Learning Outcomes (Y)
Sample N	17	17	17
Track-Track (<i>Average</i>)	78,24	82,59	80,59
Standard Deviation	7,43	8,17	9,35
Varsi	55,21	66,75	87,42
Score Minimum	62	65	60
Maximum Value	95	97	100
Quantity	1.330	1.404	1.370

Based on the prerequisite testing of the analysis, the normality test using the Kolmogorov-Smirnov method found an asymptotic significance value (2 heads) of 0.89, which was above the threshold of 0.05, which indicated that the remaining data were expected to be distributed normally. In addition, the linearity test found a deviation from the linearity value of 0.73 for the PQ4R strategy variable on learning outcomes, while the learning motivation variable on learning outcomes was found to be improved.

The hypothesis was tested using multiple linear regression analysis. The following mathematical models are generated based on statistical calculations:

$$Y = 18,43 + 0,52X_1 + 0,48X_2$$

The results of the partial test with the t-test showed that the PQ4R learning strategy variable had a significance value of 0.012, and the learning motivation variable also had a significance value of 0.010. The combined test with the F test (ANOVA) had a simultaneous significance value of 0.001, and the determination coefficient (R Squared) found from the Model Summary analysis was 0.638.

DISCUSSIONS

The purpose of this study is to determine the impact of PQ4R learning strategies and student learning motivation on social studies learning outcomes of third grade students of SDIT Ibnu

Sina Palopo. The results of the descriptive analysis showed that the implementation of the PQ4R strategy was in the good category (average 78.24), students' learning motivation was in the very high category (average 82.59), and social studies learning outcomes were in the good category.

The Influence of PQ4R Strategy and Learning Motivation on Social Science Learning Outcomes

By applying the PQ4R strategy, teachers consistently complete the Preview, Question, Reading, Reflection, Reading, and Review stages in science learning. This strategy helps students gradually understand the material, develop thinking skills, and improve their memory of the material that has been studied. These findings are in line with the research of Ayun Fillaili Arum and Vevy. In addition, a very high level of learning motivation indicates that students have a strong enthusiasm for learning that supports the achievement of optimal learning outcomes.

A well-judged social learning outcome shows that most students have achieved the expected competencies. This finding is in line with Nurfatimah et al. (2022) which states that learning outcomes are changes in students' abilities after participating in the learning process and are influenced by various factors, both internal and external. Slameto (2015) supports this idea by saying that learning outcomes are

Learning outcomes are influenced by internal factors, such as students' motivation, interests, and learning readiness, as well as external factors, such as the learning environment and learning strategies used by teachers. Therefore, the implementation of the PQ4R strategy, which is able to increase student activities during the learning process, along with high learning motivation, supports the achievement of the best social science learning outcomes.

Interpretation of Research Results

According to the results of multiple linear regression analysis, PQ4R strategies and learning motivation have a significant impact on social science learning outcomes. The F test showed a significance value of 0.001 (below 0.05) and a determination coefficient (R Squared) of 0.638, which showed that the two variables contributed 63.8% to the learning outcomes of IPAS. So, this study supports the theory used and shows that students in the third grade of SDIT Ibnu Sina Palopo have better social learning outcomes with the application of the PQ4R strategy supported by high learning motivation. Therefore, teachers are advised to implement PQ4R regularly as part of efforts to improve the quality of social studies learning.

CONCLUSION

Based on the results of analysis and discussion, it was found that the PQ4R strategy was implemented quite well in the science learning of third grade students of SDIT Ibnu Sina Palopo. Students showed a high level of motivation in learning science, and the PQ4R strategy had a significant impact on the learning outcomes of science, with a significance value of 0.001 (< 0.05) and a coefficient of determination of .

However, the results should be understood carefully as this study was conducted ex post facto with only 17 students in one school. Therefore, the results cannot be generalized broadly and show more correlations between variability. Nevertheless, it makes an empirical contribution to support the evidence that PQ4R strategies are effective, which are based on deep information processing theories in the social sciences.

A larger and broader sample, including more schools, and using more innovative forms of experimentation to gather stronger evidence about the influence of PQ4R strategies on learning outcomes. In addition, additional research may include additional variability that can affect IPAS learning outcomes, such as reading ability, learning environment, and use of educational media.

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